Amendments to the Specification:

Please replace paragraph [0021] with the following amended paragraph:

[0021] For illustrative purposes, a simplified energy-level diagram of Rayleigh and Raman scatter is shown in FIG. 1. In each type of scatter, it is assumed that an incident photon (not shown) has excited an electron (104, 112, 122) from a ground state (100, 108, 118) into a higher "virtual" energy level (102, 110, 120). According to light theory, the excited electron (104, 112, 122) will decay to a lower level (100, 114, 124). The energy released by this decaying action is typically in the form of a scattered photon (106, 116, 126). In Rayleigh scattering, the electron 104 decays back to the same level 100 from which it started. In both types of Raman scattering, however, the electron (112, 122) decays to a different level from where it started. Stokes Raman scattering occurs when the final energy level 114 is higher than the initial level 108, and anti-Stokes Raman scattering occurs when the final energy level 124 is lower than the starting level 118. As a result of a Stokes scattering event, the scattering molecule has gained energy in a vibrational or rotational excited state, whereas it has lost such energy as a result of an anti-Stokes scattering event. ~~As a result of a Stokes scattering event, the scattering molecule has gained energy in a vibrational or rotational excited state, whereas it has lost such energy as a result of an anti-Stokes scattering event.~~ Since Stokes Raman scattering is generally much more prevalent than anti-Stokes Raman scattering, the Stokes type of scattering is generally used in Raman spectroscopy.

Please replace paragraph [0032] with the following amended paragraph:

[0032] The ability of the exemplary sensing system described herein to selectively amplify a particular molecular substance offers the potential for an alternative embodiment of a sensing system that can detect multiple target molecules simultaneously. To achieve multiple detection capability, a sensing system receiver can be configured with multiple hollow core fibers, with each fiber containing a different known substance sample. An exemplary embodiment of a multiple target sensing system configuration is illustrated in the simplified block diagram of FIG. 7, with like numerals from FIGs. 2 and 3 denoting like elements in FIG. 7.

Please add the following new paragraph after paragraph 0017:

[0017.1] FIG. 7 is a block diagram of an exemplary embodiment of a multiple target sensing system.